ABSTRACT OF THE DISCLOSURE

Novel hydroxamic acid compounds are disclosed. These hydroxamates inhibit peptidyl deformylase (PDF), an enzyme present in prokaryotes. The hydroxymates are useful as antimicrobials and antibiotics. The compounds of the invention display selective inhibition of peptidyl deformylase versus other metalloproteinases such as matrix metalloproteinases (MMPs). Methods of synthesis and of use of the compounds are also disclosed.